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AUTHOR Quarles, Rebecca C.: And Others
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ABSTRACT

John Kenneth Galbraith maintains that advertising is the prime instrument for the management of total consumer demand and results in increased consumption. Galbraith also maintains that television is a more effective advertising tool, in that it reaches people in all spectrums of intelligence. Other economists disagree, holding that it is actually consumer disposable income that determines consumer demand. A path analytic model was devised to test these arguments with measures and statistics on capitalism, per capita gross national product, advertising expenditures, and aggregate consumption as variables. The results provide strong support for the assertion that it is advertising, rather than general affluence, that is the major determinant of consumption. However, they do not support the argument that television is a stronger advertising medium than print. Neither print advertising expenditures nor television advertising expenditures predict aggregate consumption as well as do total expenditures. This suggests that advertising media are complementary, and that advertising's greatest effects are achieved with a mix of media. (HTH)

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ADVERTISING AND THE MANAGEMENT OF AGGREGATE CONSUMER DEMAND: A CROSS-NATIONAL TEST OF THE GALBRAITHIAN ARGUMENT

By

Rebecca C. Quarles, Leo W. Jeffres, and Anthony P. Schnuerer

Department of Communication

Cleveland State University

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Advertising and the Management of Aggregate Consumer Demand:
A Cross-National Test of the Galbraithian Argument

There is a great deal of evidence that brand advertising affects brand sales and market share within a product class.[1] There is also evidence that industries which spend a high proportion of sales revenue on advertising tend to earn high rates of return.[2] But there is little agreement as to whether advertising can increase aggregate consumption in a society.

Galbraith holds that advertising is the prime instrument for the management of total consumer demand, a process he characterizes as providing "in the aggregate, a relentless propaganda in behalf of goods in general"[3] and which results in increased consumption at the expense of savings. Taylor and Weiserb's study of aggregate consumption in the United States from 1929 to 1968 supports this thesis.[4] However, the study has been much criticized by other economists.[5]

Generally, the profession has disagreed with Galbraith's contentions.[6] Backman, for example, flatly states that it is not advertising but consumer disposable income that determines consumer demand;[7] and Simon, in a 1970 review of the research literature on this point, concludes that there is little evidence to support Galbraith's contentions.[8] A typical study contradicting the argument was conducted by Lambin who studied ten product markets in the United States, but observed significant industry-wide advertising effects on overall product consumption for only four.[9] Such findings are consistent with a number of studies which report reciprocal cancellation effects for competitive brand advertising.[10]

Generally, the studies that contradict the Galbraithian argument deal with aggregate demand for product classes rather than with the

total society's propensity to consume; yet, the argument, taken literally, applies to undifferentiated, aggregate consumption at the societal level. The Taylor and Weiserbs study, which lends support to Galbraith's argument, does address the issue at the societal level, but the analysis is carried out over time in one society--the United States--rather than across societies. In this paper, we will address the impact of advertising on aggregate consumption on a cross-national basis.

We will also address another Galbraithian assertion--as yet untested--that it is television advertising, not print advertising, that acts as the prime instrument for the management of aggregate consumer demand. Galbraith holds that mass affluence, which makes the management of demand both possible and necessary, also makes print media obsolete as an advertising medium. What is required now, he writes, is a medium for "comprehensive, repetitive, and compelling communication by the managers of demand with the managed. It should be capable of holding the attentions of the consumer for considerable periods of time and in a comparatively effortless manner. It should reach people in all spectrums of intelligence. None should be barred by illiteracy or an unwillingness to read."[11] He further characterizes television as a persuasive, as opposed to a merely informational, medium in that it functions not just to alert the public to new products and help people make decisions between competing products, but also to create desires and, thus, to increase the total propensity to consume within a society.

The Galbraithian Argument as a Causal Model

The causal relations implicit in Galbraith's argument are represented in Figure 1.

The variables presumed to be preconditions for the development of

advertising are degree of capitalism implicit in the economic system, degree of industrialization, and per capita gross national product (GNP), which represents a measure of mass affluence.

Capitalism was included in the model as a precondition since the relationships Galbraith suggests are framed within the context of a free market. In fact, these hypothesized relationships form the basis for Galbraith's prescriptive argument that an unfettered free market does not serve human welfare in the larger sense. Thus, the causal system implicit in his writing rests upon capitalism as a contingent condition.

In the model, capitalism is depicted as causally antecedent to increased per capita GNP because economists, including Galbraith, do not dispute the idea that free market economies are more productive than planned economies. Samuelson, for example, points out that government programs to redistribute wealth from one social class to another often "end by hurting all" because of consequent losses in productivity.[12]

However, economists do not agree on the importance of productivity to other social goals. Libertarians, such as Milton Friedman, attach great importance to it[13] while Galbraith tends to ignore it, placing greater emphasis on equitable distribution of income and the satisfaction of needs In fact, Galbraith appears to take productivity, and consequent abundance, for granted.[14]

The linkage of capitalism with advertising can be drawn more explicitly from Galbraith's writings since he portrays advertising as the mechanism by which free market economies manage demand and promote efficiency.

The inclusion of industrialization as a precondition for advertising follows Galbraith's contention that advertising is a societal re-

sponse to a need for the management of total consumption. This need is said to arise when a society develops highly specialized technologies that require heavy investment and that cannot easily be converted to other uses. The viability of such investments in specialized industrial technologies must be maintained and managed through the manipulation of consumer demand, and the vehicle for such management of demand is advertising. Industrialization is represented in the model as an antecedent of per capita GNP since more sophisticated technologies generally increase productivity and, thus, the total industrial output of a society.

Since industrialization, according to Galbraith, reflects society's need to manage demand, it can be considered a necessary condition for the development of advertising. It is not, however, a sufficient condition since society must have an opportunity to manage demand as well as a need to do so.

Such an opportunity arises as a result of what Galbraith calls mass affluence, the dispersion of riches beyond the subsistence level to some critical mass of consumers. At this point in the model, we are able to provide a critical test of the disagreement between Galbraith and his detractors. Galbraith argues for the following causal sequence: that mass affluence leads to advertising which in turn determines consumer demand. Galbraith's opponents, on the other hand, argue for the direct path--that mass affluence alone determines consumption.

The Path Analytic Approach

Path analysis allows us to test this set of arguments and hypotheses. The method, as described by Duncan, permits researchers to ex-

press a complex set of relationships as simple graphic terms, as in Figure 1, and to test these relationships both individually and as a system.[15] It also allows the researcher to explore indirect effects, or causal sequences, rather than forcing the analysis of variables as competing sources of variance. For example, by using path analysis we can assess the strength of the indirect path of mass affluence through advertising to aggregate consumption implicit in Galbraith's argument against the strength of the direct path from mass affluence to aggregate consumption implicit in the arguments of mainstream economists.

While path analysis apportions the independent contributions to variance in the dependent variable among independent variables in an ordered system, it cannot establish time order when applied to cross-sectional data. Thus, the validity of the inferences drawn depends on the researcher's ability to order the variables correctly in the model.

In this case, we have ordered the variables according to the causal ordering implicit in the Galbraithian argument. This is necessary in order to provide a fair test of his ideas. Galbraith's ideas are best represented by a recursive model, or a model in which there are no instances of two-way causality. Some economists might, however, argue for a nonrecursive, or two-way, relationship between per capita GNP, our measure of mass affluence, and per capita advertising expenditures in that advertising, by stimulating demand may work toward increased production. Similarly, a nonrecursive relationship may exist between aggregate consumption and per capita GNP. Such possibilities were not included in the model since it was constructed to test two competing theoretical perspectives, neither of which considers these possibilities.

Operationalization of Variables in the Causal Model

The exogenous variables are:

X_1- CAPITALISM - Nations are characterized as either socialist, capitalist-socialist, capitalist-statist, or capitalist, according to a measurement system developed by Gastil.[16]

X_2- INDUSTRIALIZATION - This measure was also developed by Gastil.[17]

Endogenous variables are:

X_3- PER CAPITA GNP: This statistic was taken from the Yearbook of National Accounts Statistics 1977.[18] 1975 figures were used to coincide with our advertising measures.

X_4- ADVERTISING EXPENDITURES PER CAPITA: Three advertising measures were derived from data provided by Hooper: total advertising expenditures per capita, television advertising expenditures per capita, and print advertising expenditures per capita.[19] Data were available for 42 nations, ranging from the United States to Japan and from Mexico to Malaysia and Nigeria. Thus, there are representatives of both the industrialized nations of Western Europe and North America, as well as of the developing countries in Latin America, Africa, and Asia. Notably absent from the analysis are Eastern European nations and the Soviet Union.

X_5- PER CAPITA AGGREGATE CONSUMPTION - Our measure of per capita aggregate consumption is Household Expenditures per Person, taken from International Marketing and Statistics.[20]

Results

The figures that follow depict the results of path analyses using total advertising expenditures per capita (Figure 2), television advertising expenditures per capita (Figure 3), and print advertising expenditures per capita (Figure 4) as indicators of advertising. Separate analyses for print and television advertising were carried out to test Galbraith's assertion that television is superior to print in the management of aggregate consumption.

The figures should be interpreted as follows: a solid line with a single-headed arrow represents a statistically-significant relationship;[21] a broken line with a single-headed arrow represents a non-significant relationship; coefficients associated with these lines are standardized beta weights or path coefficients (P); a double-headed curved arrow represents an unanalyzed correlation. These correlations are not analyzed because the variables involved are predetermined, or exogenous to the model.

The Impact of Total Advertising

Figure 2 provides strong support for Galbraith's assertion that it is advertising, rather than general affluence, that is the major determinant of consumption; the independent contribution of advertising (P=.66) is twice that of per capita GNP (P=.33).

The analysis also buttresses Galbraith's notion of a causal sequence from affluence thorugh advertising to consumption. The paths from per capita GNP to advertising (P=.57) and from advertising to consumption (P=.66) are considerably stronger than that from per capita GNP to consumption (P=.33) and, in fact, the indirect path from per capita GNP through advertising accounts for 53% of the total causal covariation in consumption that can be attributed to per capita GNP.[22]

Thus, our results suggest, in accordance with Galbraith's argument, that increased affluence results in increased consumption to the extent that it also results in increased advertising, which appears to be the major determinant of consumption.

Galbraith's argument is not as precise as to the role of industrialization, except that it is a precondition for the development of advertising. It does not appear to have any significant direct impact on advertising, as one might presume it might from reading Galbraith's treatises, but, as we suspected, to work indirectly through its contributions to affluence. More specifically, the direct path (from industrialization to advertising (P=.08) is null, but the paths from industrialization to per capita GNP (P=.25) and from per capita GNP to advertising (P=.57) are relatively strong. Thus, this indirect path accounts for 64% of the total causal covariation in consumption attributable to industrialization.

Thus, it appears that industrialization has no direct impact on advertising--nor on consumption--but that it works as part of a causal sequence by stimulating production and, thus, advertising.

Capitalism, although it does not affect per capita GNP nor consumption directly, does appear to have some impact on advertising (P=.25), which has a strong impact on consumption. This indirect path accounts for 94% of the total causal covariation in consumption attributable to capitalism. The most obvious explanation for this result is that noncapitalistic, centralized economies typically have nationalized or publicly-owned broadcast systems which accept less advertising than do media in capitalistic economies. However, inspection of Figures 3 and 4 shows that the relationship between capitalism and advertising is

positive, if weak, for print advertising (P=.17) and null for television advertising (P=-.06), a finding we would not expect if this relationship were an artifact of the type of media systems of noncapitalistic countries. Another explanation is that capitalist countries tend toward consumerism. That is, they convert more of their GNP into consumables rather than industrialist or military hardware. It may be that consumer societies, whatever their economic basis, find advertising a more efficient means of distribution than centralized bureaucracies.[23]

Our finding that capitalism does not appreciably affect per capita GNP is, as noted earlier, contrary to the observation of most economists. Such observations often contrast the highly centralized economies of the Communist bloc against highly developed Western nations. Our data did not include Communist countries, and, thus, we were unable to consider the full range of variations in degree of capitalism. Thus, this finding should not be taken as evidence against the well-accepted notion that free markets are more productive than centralized economies.

The Relative Impact of Television and Print Advertising

Figures 3 and 4 show two versions of the basic causal model. Figure 3 utilizes television expenditures as an indicator of advertising while Figure 4 uses print expenditures.

The Galbraithian argument would predict a much heavier impact of television than print advertising on consumption since much of Galbraith's reasoning rests on the special persuasive function of television advertising, as opposed to the merely informational function of

print advertising. However, our results show quite the opposite: if anything, television expenditures are a less powerful predictor of consumption (P=.32) than are print expenditures (P=.54). It is noteworthy also that neither predicts consumption quite as well as does total advertising, suggesting a certain complementarity to advertising media.

When television advertising alone is considered, the results no longer suport the Galbraithian notion that affluence works indirectly through advertising to increase consumption. The impact of per capita GNP on consumption (P=.60) is much stronger than either its impact on advertising (P=.31) or TV advertising impact on consumption (P=.32). Thus, while total advertising accounted for 53% of the total causal covariation attributable to per capita GNP, television advertising accounts for just 14%.

Print advertising expenditures (P=.54) do appear to have a strong impact on consumption, if not as strong as total advertising. The indirect path from per capita GNP through print advertising accounts for 39% of the total causal covariation attributable to per capita GNP, nearly three times as much as that accounted for by television advertising.

Again, in contrast to Galbraith's argument, per capita GNP has a lesser impact on television expenditures (P=.31) than it does on print expenditures (P=.51). Thus, mass affluence, by itself, does not appear to generate massive television advertising revenues.

As in the case of total advertising, industrialization has no impact on either television or print advertising expenditures. Capitalism as noted earlier, has no effect on television advertising, and only a moderate positive impact on print advertising.

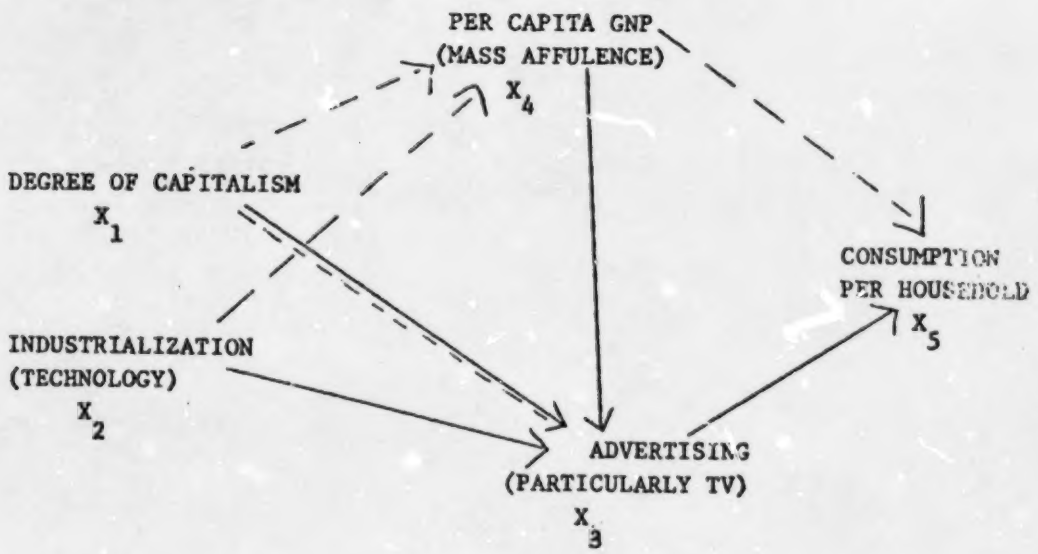
Discussion

Our results support Galbraith's idea that advertising is the major determinant of consumption--that increased mass affluence results in increased consumption to the extent that it also results in increased advertising.

However, they do not support his argument that television advertising is a more patent propaganda tool "in behalf of goods in general" than is print advertising. This is an important point since Galbraith portrays print advertising as informational and television advertising as "pervasive" and uses these distinctions to buttress his larger argument that the consumer is an unwitting pawn of the industrial establishment. Since so-called informational advertising seems to affect consumption more than so-called persuasive advertising, it is possible that consumers are not really manipulated by advertising but are instead beneficiaries of a more efficient distribution system made possible by advertising. Thus, this study while supporting one of Galbraith's more important assumptions, throws doubt on the validity of his larger prescriptive argument.

It is noteworthy also that neither print advertising expenditures nor television advertising expenditures predict aggregate consumption as well as does total advertising expenditures. This suggests that advertising media are complementary and that advertising's greatest aggregate effects are achieved by a mix of media. Indeed, this effect is highly consistent with the advice offered by any reliable advertising textbook that different media are appropriate for different products and different target publics and that many channels of communication should be utilized in a total advertising campaign.

FIGURE 1. GALBRAITH'S ARGUMENT: A CAUSAL MODEL



X_4 through X_3 to X_5 : the essence of Galbraith's argument and his critical point of divergence from more traditional economists who argue for the direct path: X_4 to X_5.

X_4 to X_5 : supported by such economists as Simon, Backman, and Laubin.

X_2 through X_3 to X_5 : another essential component of Galbraith's argument not supported by more traditional economists.

X_2 to X_4: common wisdom

X_1 to X_4: strongly supported by such economists as Samuelson and Friedman and conceded by Galbraith but not part of his argument.

X_1 to X_3: Implicit in Galbraith's argument; other economists agree.

_____ Galbraithian arguments

- arguments by other economists

═══════════ agreement between Galbraith and other economists

FIGURE 2. PATH ANALYSIS USING TOTAL ADVERTISING EXPENDITURES PER CAPITA

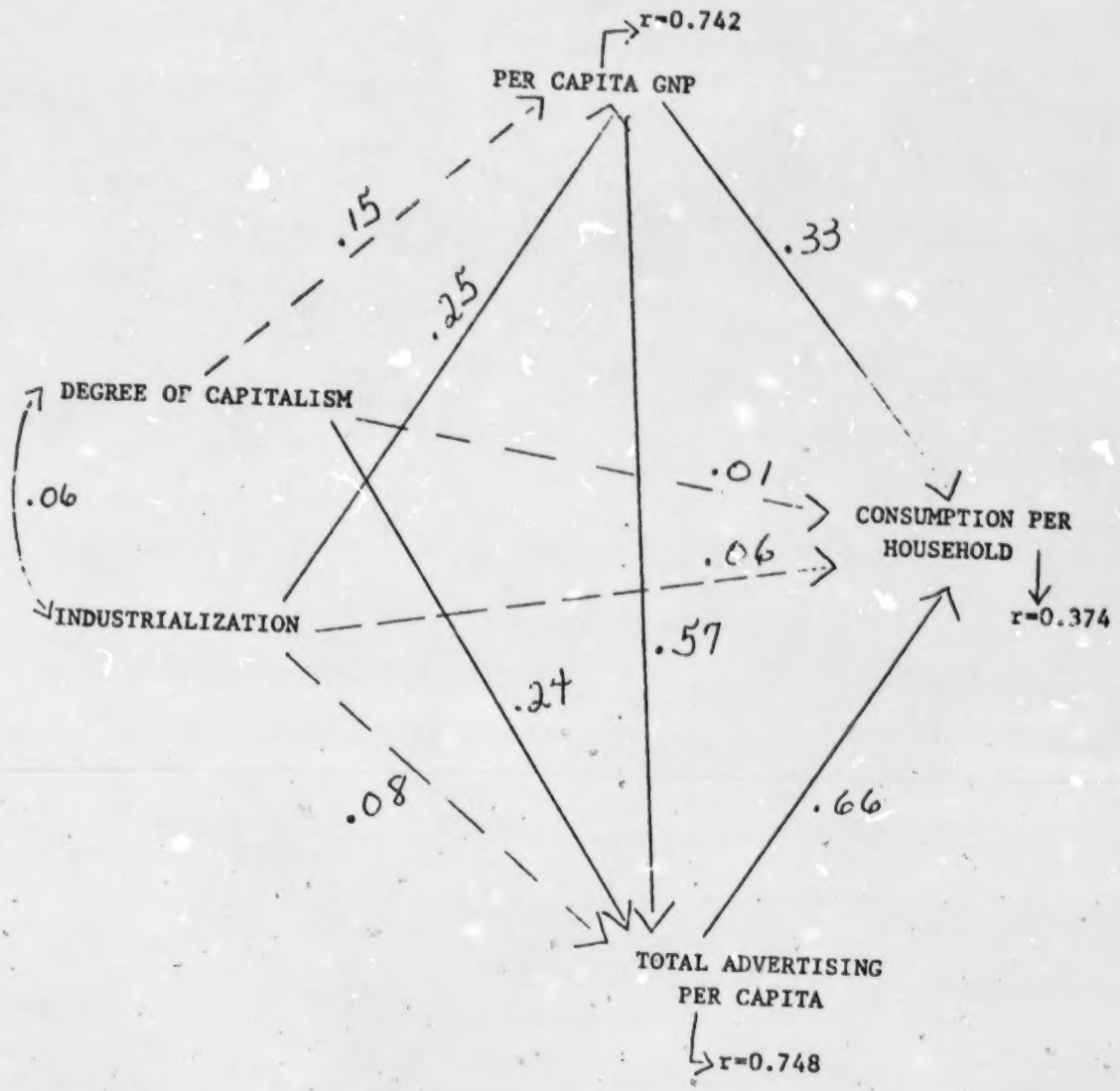


FIGURE 3. PATH ANALYSIS USING TELEVISION ADVERTISING EXPENDITURES PER CAPITA

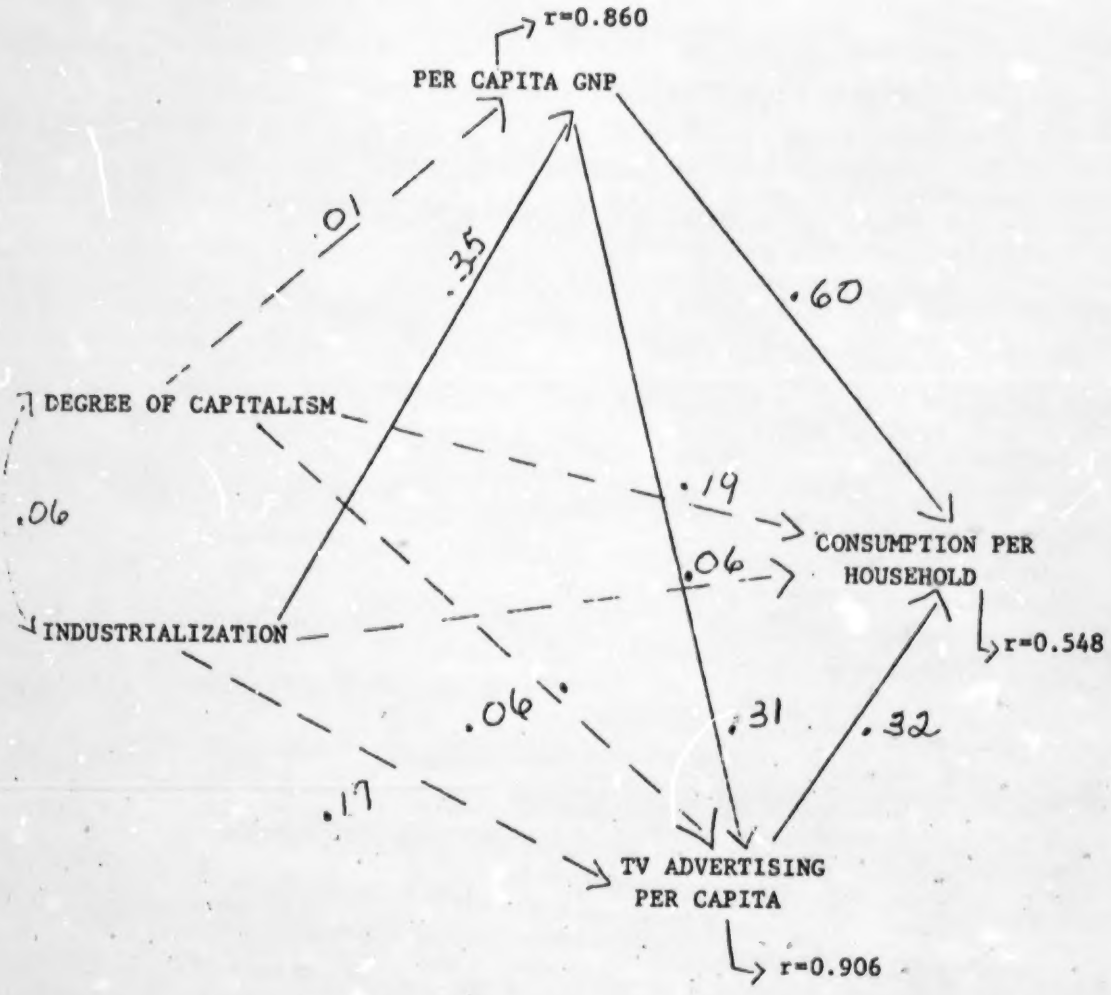
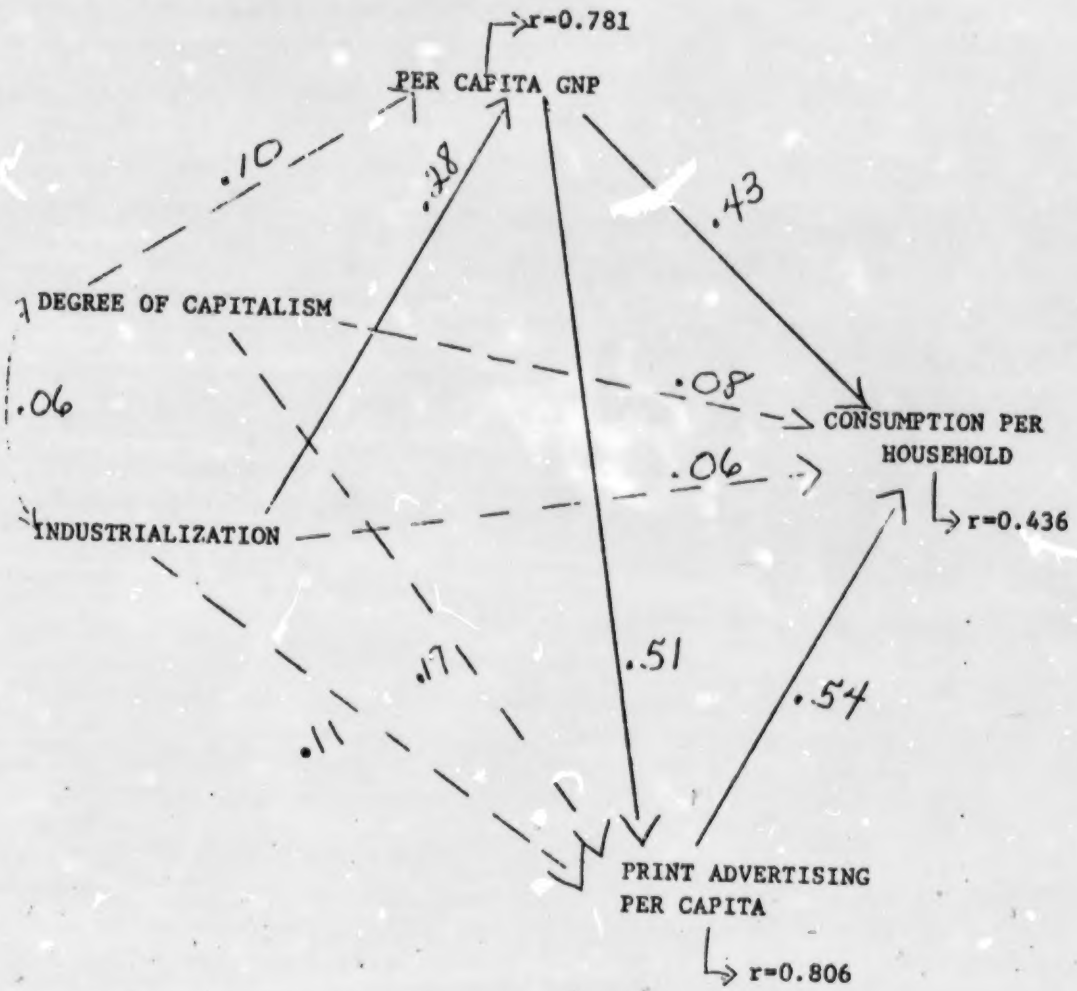


FIGURE 4. PATH ANALYSIS USING PRINT ADVERTISING EXPENDITURES PER CAPITA



Footnotes

1. Numerous studies report this not-too-surprising result. Among the more prominent are: J. J. Lambin. Advertising, Competition and Market Conduct in Oligopoly over Time. Amsterdam: North Holland Publishing Co., 1976; L. J. Telser, "Advertising and Cigarettes," Journal of Political Economy 70, 5, 471-499, 1963, R. L. Schultz. "Market Measurement and Planning with a Simultaneous equation Model: an Empirical Investigation." Journal of Marketing Research 8, May, 153-164, 1971.
2. W. S. Comanor and T. A. Wilson. "Advertising Market Structure and Performance." Review of Economcs and Statistics 49, 4, 423-440, 1967.
3. J. K. Galbraith. The New Industrial State. Boston, 1967 (P. 218).
4. L. D. Taylor and D. Weiserbs. "Advertising and the Aggregate Consumption Function." The American Economic Review. 62, Sept., 642-655, 1972.
5. Criticisms of the study's methodology and design are presented in J. J. Lambin (1976) op. cit.
6. See, for example: R. M. Salow, "The New Industrial State or Son of Affluence." Public Interest. 9, Fall, 100-108, 1967 and C. H. Hession, John Galbraith & His Critics, New York: New American Library, 1972.
7. J. Backman. Advertising and Competition. New York: New York University Press, 1967.
8. L. J. Simon. Issues in the Economics of Advertising. Urbana: University of Illinois Press, 1970.
9. Lambin (1976) op. cit.

10. See, for example, Lambin (1976) op. cit.; Telser (1962) op. cit.; D. G. Clarke. "Sales-advertising, Cross-elasticity and Advertising Competition," Journal of Marketing Research 10, August, 250-261, 1973.
11. Galbraith (1967) op. cit. p. 216
12. P. A. Samuelson, Economics, 10th ed. New York: McGraw-Hill, 1976, p. 800.
13. Friedman's works include Capitalism and Freedom, Chicago, University of Chicago Press, 1962 and An Economist's Protest, Glen Ridge; N. J.: Horton, 1972.
14. This down-playing of the importance of productivity has led Earnest Van den Haag ("Affluence, Galbraith, and the Democrats," Commentary, Sept. 1960, p. 206) to characterize the argument as "not only fanciful, but frivolously parochial."
15. O. D. Duncan. Introduction to Structural Equation Models. New York: Academic Press, 1975.
16. R. D. Gastil. Freedom in the World: Political Rights and Civil Liberties 1978. Boston: Freedom House, 1978
17. ibid.
18. United Nations. Yearbook of National Accounts Statistics 1977. Vol. II, International Tables. New York: Department of Economic and Social Affairs, 1977.
19. S. I. Hooper and International Advertising Association. World Advertising Expenditures. New York: Hooper, 1976.
20. International Marketing Data and Statistics 1978/1979. London: Euromonitor Publications Ltd., 1979.

21. The criterion set for statistical significance was .01 and the statistic applied was the F-ratio.

22. The proportion of total causal covariation between per capital GNP (X_3) and consumption per household (X_5) explained by the indirect path through advertising (X_4) was calculated as follows:
where variation explained by the indirect path is equal to

$$(P_{43})\ (P_{54})$$

and the variation explained by the direct path is equal to

$$(P_{53})$$

then total causal covariation is equal to

$$(P_{43})(P_{54}) + P_{53}$$

and the proportion of total causal covariation explained by the indirect path is equal to

$$\frac{(P_{43})(P_{54})}{(P_{43})(P_{54}) + P_{53}}$$

This method is applied to all such calculations that follow.

23. Advertising is becoming more prevalent in noncapitalistic nations. In fact, it has been called a growth industry in the Soviet Union. In a discussion of this phenomenon, see: M. T. O'Keefe and K. G. Sheinkopf. "Advertising in the Soviet Union: Growth of a New Media Industry." Journal Quarterly, 53, Spring, 80-87, 1976.